What is claimed is

5 1. A circuit module comprising:

A carrier;

stacks of circuit chips arranged on a surface of the carrier and including several circuit chips arranged in different layers,

wherein the circuit chips are grouped in different groups, wherein the groups are not active at the same time,

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wherein the circuit chips are arranged such that circuit chips belonging to the same group are arranged in different layers in adjacent stacks.

- 20 2. Circuit module according to claim 1, wherein stacks of circuit chips are arranged on a first surface and a second surface of the carrier.
- 3. Circuit module according to claim 1, wherein the circuit 25 module is a memory module and the circuit chips are memory chips.
 - 4. Circuit module according to claim 3, wherein the memory module is a DIMM and the memory chips are DRAMs.

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- 5. Circuit module according to claim 3, wherein the groups into which the circuit chips are grouped are respective memory banks.
- 35 6. Circuit module according to claim 1, further comprising means to activate the circuit chips belonging to the same group.

7. Circuit module according to claim 6, wherein the means to activate the circuit chips belonging to the same group comprises a bank select signal.

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